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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,766	11/30/2001	Peter F. Bemis	15005-9420-01	6001

23409 7590 09/11/2003

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EXAMINER

KUHNS, ALLAN R

ART UNIT

PAPER NUMBER

1732

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/997,766

Applicant(s)

BEMIS ET AL.

Examiner

KUHNS

Group Art Unit

1732

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1 - 27 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☒ Claim(s) 1 - 27 are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

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1. During a telephone restriction conversation with Mr. Gregory Hartwig on August 28, 2003, the examiner stated that claims 21-27 would be placed in a group separate from claims 1-13.

Upon further review, the examiner has concluded that these claims should be placed in a single group.

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-13 and 21-27, drawn to a method of molding, classified in class 264, subclass 45.1.

II. Claims 14-20, drawn to a plastic article, classified in class 428, subclass 304.4.

3. The inventions are distinct, each from the other because:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product structure as claimed, or as imputed from the steps practiced, can be made by another and materially different process such as by molding the outer material and inner material in two completely separate steps and subsequently combining the separate moldings into an article of desired shape. Note MPEP 2113 with regard to treatment of product-by-process claims.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art requiring divergent fields of search for the respective inventions, restriction for examination purposes as indicated is proper.

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5. During a telephone conversation with Gregory Hartwig on August 28, 2003 a provisional election was made with traverse to prosecute the invention of Group I, now claims 1-13 and 21-

27. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 14-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

6. Claims 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims are indefinite because "the simple salts" lacks antecedent basis within the claims. Clarification is required.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 6 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikoshi. Horikoshi discloses or suggests the basic claimed method of injection molding including (1) mixing a plastic inner material and an endothermic blowing agent to form a core mixture, (2) injecting a plastic outer material from a first injection unit into a co-injection section to create a flow of outer material therethrough, (3) injecting the core mixture from a second injection unit into the co-injection section to create a flow of core mixture therethrough, and (4) expanding the core mixture by providing heat for the endothermic blowing agent to absorb.

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Controlling relative flows of outer material and core material is well known and such would have been obvious to one of ordinary skill in the art in order to establish the relative amounts of skin and core material in the injection molded composite.

Horikoshi provides heating prior to injection, as in claim 2, but heating during or after injection to activate an endothermic blowing agent, as in claims 3-4, is also well known and would have been obvious to one of ordinary skill in the art in order to cause desired expansion. Horikoshi disclose blowing agents, as in claim 6, and suggest the flow control steps of claims 8-13 based on the article shape produced.

9. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikoshi as applied to claims 1-4, 6 and 8-13 above, and further in view of Wason et al. (RE 35,239). Wason et al. acknowledge at column 2, lines 38-40 that a mixture of sodium bicarbonate and sodium hydrogen citrate is effective as a blowing agent. It would have been obvious to one of ordinary skill in the art to use such a mixture in the method of Horikoshi because Wason et al. teach that such a mixture is effective to cause foaming or expansion.

10. Claims 21-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikoshi as applied to claims 1-4, 6, and 8-13 above, and further in view of Van Der Hoeven et al. Horikoshi discloses the basic claimed method except for an appropriate pressure at which to form the core mixture, but Van Der Hoeven et al. teach the introduction of a blowing agent to plastic material at a pressure within the claimed range at column 12, lines 28-37. It would have

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been obvious to one of ordinary skill in the art to employ such a pressure in the practice of the method of Horikoshi in order to prevent expansion of the mixture prior to completing mixing. Relative amounts of material, as in claims 22-24, would have been readily established through routine experimentation by one of ordinary skill in the art in order to produce a composite which meets specifications. Horikoshi teaches the use of a blowing agent, as in claim 27, at column 3, lines 24-28 and claim 25 essentially represents a statement of intended uses for the molded article rather than a manipulative step used to distinguish "method" claims.

11. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horikoshi in view of Van Der Hoeven et al. as applied to claims 21-25 and 27 above, and further in view of Wason et al. (RE 35,239). The relevant teaching of Wason et al. And motivating reasons for combination with Horikoshi are as set forth above in the rejection of claims 5 and 7.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allan Kuhns whose telephone number is (703) 308-3462. The examiner can normally be reached on Monday to Thursday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaiani, can be reached on (703) 305-5493. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*Allan R. Kuhns*  
ALLAN R. KUHNS  
PRIMARY EXAMINER AU 1732  
9-7-03